

REMARKS

Claims 1-28 were pending in the application. Claims 1, 6, 20-22, 25, and 28 have been amended. Upon entry of these amendments, Claims 1-28 will be pending and under active consideration. Claims 1, 6, 20, 21, 25, and 27 are independent.

Applicants submit respectfully that the amendments presented herein are supported fully by the claims and/or specification as originally filed and, thus, do not represent new subject matter.

Claims 1, 6, 20-22, 25, and 28 have been amended to point out more particularly and claim more distinctly that which Applicants regard as their invention by now reciting "bonded" in place of "associated" or "linked."

Claim 21 is amended herein to insert the term "core" prior to the term "particle."

Claim 27 is amended herein to reword the preamble of the claim to read "A method of forming a pooled set of magnetically-responsive populations of particles, said particles comprising a core particle and at least one magnetic substance bonded covalently with said core particle, comprising."

Applicants respectfully request entry of the amendments and remarks made herein into the file history of the present invention. Reconsideration and withdrawal of the rejections set forth in the above-identified Office Action are respectfully requested.

I. The Rejection Under 35 U.S.C. § 103(a) Should Be Withdrawn

The Office Action, at paragraph 2, rejects Claim 27 as allegedly being obvious over U.S. Patent No. 5,395,688 to Wang *et al.* (hereinafter, "Wang") in view of

U.S. Patent No. 5,981,180 to Chandler *et al.* (hereinafter, "Chandler"), under 35 U.S.C. § 103(a) for the reasons of record. In sum, the Office Action alleges that the claim does not contain the limitation requiring that a covalent bond exist between a core particle and a magnetic substance. Applicants traverse respectfully.

Applicant submits respectfully that the novel particles and methods of the present invention are neither taught nor suggested by Wang, either alone or in view of Chandler. There is neither teaching nor suggestion in these references that a covalent bond exist between a core particle and a magnetic substance. Applicants respectfully direct Examiner's attention to Claim 27, as amended, which recites, "[A] method of forming a pooled set of magnetically-responsive populations of particles, said particles comprising a core particle and at least one magnetic substance bonded covalently with said core particle." Thus, Applicants submit respectfully that, as Chandler fails to cure the deficiencies of Wang with respect to Claim 27 of the present invention, as noted in Applicants' prior response in Paper No. 10, the combination of the Wang with Chandler fails to meet the threshold required for establishing a *prima facie* case of obviousness under 35 U.S.C. § 103(a).

Accordingly, Applicants submit respectfully that the rejection of Claim 27 under 35 U.S.C. § 103(a) has been overcome, and Applicants request respectfully that the rejection of Claim 27 under 35 U.S.C. § 103(a) be withdrawn.

II. Rejections Under 35 U.S.C. § 112, Second Paragraph

At paragraph 1 of the Office Action, Claims 1-26 and 28 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to point out

particularly and claim distinctly the subject matter regarded as the invention. The Office Action alleges that the term “associated” is indefinite because it is unclear whether a bond is formed between the core and substance or whether a third substance may be interposed between the two. Further, the Office Action alleges that the term “core particle” in Claim 22 has no antecedent basis. Applicants traverse respectfully.

Without acquiescing in the propriety of the rejection, and solely to advance prosecution of the present application, Claims 1, 6, 20-22, 25, and 28 are amended herein to replace the terms “associated” and “linked” with the term “bonded.” Applicants note that the specification as filed, particularly on page 6, recites that “one skilled in the art would be familiar with the large number of methods of creating the bond between the [substances] and the [core particles],” and that such “coupling can be achieved by choosing [substances] and [core particles] with mutually reactive groups, such as amino functionalized [substances] and carboxylate functionalized [core particles].” Applicants submit respectfully that one skilled in the art will recognize that functionalizing groups attached to the core particles and magnetic substances, the functionalizing groups comprising reactive moieties for forming covalent bonds to attach the magnetic substances to the core particles, may also comprise extended linker groups. In other words, although the core particles and magnetic substances are joined one to the other through a series of covalent bonds, the magnetic substances and core particles are not necessarily joined “surface-to-surface.” They may be separated by a linker having a length equivalent to the sum of the overall lengths of the functionalizing groups.

With regard to the alleged lack of antecedent basis in Claim 21 for the use of the term “core particle” in Claim 22, and without acquiescing in the propriety of the rejection,

and solely to advance prosecution of the present application, Claim 21 is amended herein to insert the term "core" prior to the term "particle." Accordingly, there is now clear antecedent basis in Claim 21 for the use of the term "core particle" in Claim 22.

In view of the above, Applicants suggest respectfully that the rejections have been overcome, and Applicants request respectfully that the 35 U.S.C. § 112, second paragraph, rejections of Claims 1-26 and 28 be withdrawn.

CONCLUSION

Applicants submit respectfully that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3500. All correspondence should be directed to our address given below.

AUTHORIZATION

Applicants believe there is no fee due in connection with this filing. However, to the extent required, the Commissioner is hereby authorized to charge any fees due in connection with this filing to Deposit Account 50-1710 or credit any overpayment to same.

Respectfully submitted,



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